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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,520	10/11/2001	Bettina Fath	101216-19	9360

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EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 11/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/975,520

Applicant(s)

FATH ET AL.

Examiner

Lakshmi S Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Receipt of the following is acknowledged:

1. Declaration, dated 1-4-02
2. Late fee, response to incomplete reply and request for extension of time, dated 2-12-02
3. Priority papers and preliminary amendment A, dated 2-27-02
4. Information Disclosure Statement dated 2-27-02.

### ***Minor Informalities***

The following changes to claims 1, 2, 4 and 7-9 are suggested to applicants:

Claim 1 recites "Hair care composition on aqueous basis". Instead, examiner suggests changing it to "an aqueous hair care composition" so as to be more clear regarding the nature of composition.

Claim 2 recites, "consist of", which is improper. It is suggested to applicants to change the expression to "consisting of".

Claim 4 recites chemical names of a number of UV-absorbers, which includes periods (.) instead of ",", in the chemical names. For example, 2,4-dihydroxybenzophenone is written in the claim as 2.4-dihydroxybenzophenone.

Claims 7-9 recite additional ingredients/components in claim 1, such as surfactants, betaines etc. It is suggested to applicants to include "further or additionally" before the word "contains". Further, the word "amidopropyl" is misspelled in claim 9.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,187,298 to Kurz et al (hereafter Kurz)

Instant claim 1 is a hair composition on aqueous basis, comprising at least one UV-absorbing substance and at least one mica/titanium dioxide (TiO<sub>2</sub>) pigment, whereby at least 90% by weight thereof have a particle size between about 1 to about 250 microns. Claim 2 recites 80% to 90% of the pigment consists of mica and 10% to 20% of the pigment consists of TiO<sub>2</sub>. Claim 3 recites mica/TiO<sub>2</sub> pigment in an amount of 0.05% to 5% by weight to the total weight of the composition.

Kurz discloses sunscreen compositions for protecting human hair, also for sensitized hair and also as a sunscreen, in the form of creams, lotions, aqueous and aqueous-alcoholic gels, emulsions etc (col. 6, lines 18-35). The composition of Kurz contains pigments of mica and TiO<sub>2</sub>, having a particle size of <200 microns (col. 2, lines 44-58). Kurz does not explicitly state what percentage of particles has the claimed sizes. However, examiner notes that instant specification describes Timiron, a trademark product, as the suitable mica/TiO<sub>2</sub> pigment particles for the instant invention (page 2, lines 6-8). Kurz also teaches the same trademark

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product in the composition (see col. 2, lines 44-58 and examples in col. 7-11) and accordingly, disclose the claimed pigment. Further, Kurz discloses the pigments in an amount of 0.5% to 20%, preferably 2-10% (col. 4, lines 36-39, col. 5, lines 19-21 and examples in col. 7-11).

Claims 4 and 5 recite the UV absorbing compounds and their amounts from about 0.05% to 2.5%, by weight.

Kurz discloses organic UV absorbing substances (i.e., methoxycinnamate, salicylic acid derivatives, 4-aminobenzoic acid etc) as claimed in the sunscreen compositions and in the same amounts, as claimed (col. 5, lines 22-38 and examples in col. 7-11 under the trademark name Eusolex).

Claim 7 recites surfactants in an amount of 0.1% to 5% by weight of the composition. Examples 1-3 recite Brij 76, which is nothing but surfactant and is a polyoxyethylene ether of higher aliphatic alcohols. Similarly, Examples 1-3 recite Miglyol, which is a fatty acid ester and reads on the claimed surfactant. Accordingly, Kurz anticipates instant claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 19810120 to Bettina et al (DE) in view of US 6,187,298 to Kurz et al.

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DE teaches water based hair care compositions containing green tea extract and at least one mono or oligosaccharide for the treatment of hair (English abstract attached). Example 4 on page 5 recites benzophenone-4, which belongs to the benzophenone type of UV absorbers of instant claim 4. DE does not teach the claimed particulate pigments and UV absorbing substances (claims 1-5).

Kurz, discussed above, teaches hair care compositions containing mica/TiO<sub>2</sub> pigments, having the same particle size as claimed in the instant invention, as sunscreens for protecting the hair from photochemical damage due to UV radiation from sunlight (col. 1, lines 34-36). Accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to add mica/TiO<sub>2</sub> pigments having a particle size of less than 200 microns to the hair care compositions of DE because Kurz teaches the mica/TiO<sub>2</sub> particulate pigments are cosmetically well tolerated filters that filter the damaging rays in the UV and long-wave region and thus protect complete protection from solar radiation (col. 2). Further, Kurz teaches that normal as well as hair that is subjected to bleaching or dyeing, is also protected by the sunscreen pigments. Accordingly, one of an ordinary skill in the art would have expected to protect the hair from damaging solar radiation by using hair composition of DE containing the articulate pigments of Kurz.

Claims 1-5 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,309,628 to Ansmann et al (hereafter Ansmann) in view of Kurz.

Instant claims recite a hair composition containing at least one betaine and at least one C12-C18 alkyl amidopropyl dimethyl or diethyl amine.

Ansmann teaches cosmetic hair compositions comprising a dialkyl ether, silicone compound and emulsifier such as alkyl oligoglycoside, betaines, alkyl ether sulfates etc (absent), which are more compatible with skin, less irritating and have improved conditioning and anti-static effect. Among the emulsifiers, Ansmann teaches betaines, such as carboxyalkylation products of secondary and tertiary amines (formula VI in col. 4 and formula VII in col. 5), which read on the instant betaines. In particular, C12-14 cocoalyldimethyl amine, stearyl dimethyl amine C16/18 tallow dimethyl amine, N,N-diethyl aminopropyl amine etc (col. 5, lines 1-33). Ansmann teaches using the compositions for hair applications and incorporating hair care additives such as UV filters, fragrances, anti-dandruff agents (col. 6, lines 13-21). Among the UV filters, Ansmann teaches including the claimed organic UV absorbers as well as inorganic finely dispersed metal oxides i.e., TiO<sub>2</sub>, mica, etc., having a particle size of <100 nm (col. 8, lines 13-41). Ansmann does not teach mica/TiO<sub>2</sub> pigments as claimed and instead teaches these pigments separately.

Kurz, discussed above, teaches hair care compositions containing mica/TiO<sub>2</sub> (interference) pigments, having the same particle size as claimed in the instant invention, as sunscreens for protecting the hair from photochemical damage due to UV radiation from sunlight (col. 1, lines 34-36). Accordingly, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to add mica/TiO<sub>2</sub> pigments having a particle size of less than 200 microns to the hair care compositions of Ansmann because Kurz teaches the mica/TiO<sub>2</sub> particulate pigments are cosmetically well tolerated filters that filter the damaging rays in the UV and long-wave region and thus protect complete protection from solar radiation (col. 2). Further, Kurz teaches that normal as well as hair that is subjected to bleaching or dyeing, is also protected

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by the sunscreen pigments. Accordingly, one of an ordinary skill in the art would have expected to protect the hair from damaging solar radiation by using hair composition of Ansmann containing the articulate pigments of Kurz.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7924 for regular communications and 703-308-7924 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lakshmi S Channavajjala  
Examiner  
Art Unit 1615

November 27, 2002